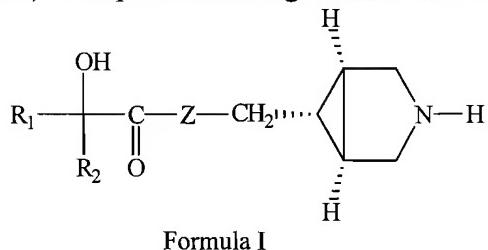


**Amendment to Claims**

1. (*Currently Amended*) Compounds having the structure of Formula I:



and their pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, or N-oxides, polymorphs, or metabolites, wherein

R<sub>1</sub> and R<sub>2</sub> are independently selected from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl or optionally substituted phenyl wherein optional substituent(s) is/are selected from C<sub>1</sub>-C<sub>3</sub> alkyl, C<sub>1</sub>-C<sub>3</sub> alkoxy and halogen;

Z represents oxygen or NR<sub>3</sub> wherein R<sub>3</sub> represents hydrogen or C<sub>1</sub>-C<sub>3</sub> alkyl.

2. (*Previously Amended*) A compound selected from

N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-phenyl-2-hydroxy-2-(N-methyl) phenylacetamide (Compound No. 1);

N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-phenyl-2-hydroxy-2-(N-methyl) phenylacetamide tartarate salt (Compound No. 2);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-isopropyl-2-hydroxy-2-phenylacetamide (Compound No. 3);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-isopropyl-2-hydroxy-2-phenylacetamide hydrochloride salt (Compound No. 4);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(3-pentyl)-2-hydroxy-2-phenylacetamide (Compound No. 5);

(2R, 2S)-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-cyclopentyl-2-hydroxy-2-phenylacetic acid ester (Compound No. 6);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-cyclopentyl-2-hydroxy-2-(N-methyl) phenylacetamide (Compound No. 7);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-cyclopentyl-2-hydroxy-2-(N-methyl) phenylacetamide hydrochloride salt (Compound No. 8);

(2R, 2S)-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-methyl-2-hydroxy-2-phenylacetic acid ester (Compound No. 9);

(2R, 2S)-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-isopropyl-2-hydroxy-2-phenylacetic acid ester (Compound No. 10);

(2R, 2S)-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(3-pentyl)-2-hydroxy-2-phenylacetic acid ester (Compound No. 11);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-methyl-2-hydroxy-2-phenylacetamide (Compound No. 12);

(2R)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-isopropyl-2-hydroxy-2-(N-methyl) phenylacetamide (Compound No. 13);

(2R, 2S)-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(m-methylphenyl)-2-hydroxy-2-phenylacetic acid ester (Compound No. 14);

(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(p-fluorophenyl)-2-hydroxy-2-phenylacetamide (Compound No. 15);

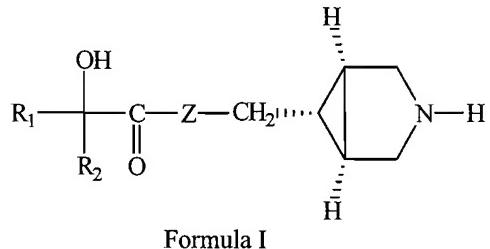
(2R, 2S)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(p-methylphenyl)-2-hydroxy-2-phenylacetamide (Compound No. 16);

(2R)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(p-fluorophenyl)-2-hydroxy-2-(N-methyl) phenylacetamide (Compound No. 17);

(2R)-N-[(1 $\alpha$ , 5 $\alpha$ , 6 $\alpha$ )-3-azabicyclo[3.1.0]hex-6-yl-methyl]-2-(p-methylphenyl)-2-hydroxy-2-(N-methyl) phenylacetamide (Compound No. 18).

3. *(Original)* A pharmaceutical composition comprising a therapeutically effective amount of a compound as defined in claim 1 or 2 together with pharmaceutically acceptable carriers, excipients or diluents.
4. *(Currently Amended)* A method for treatment or prophylaxis of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is mediated through

muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula I,



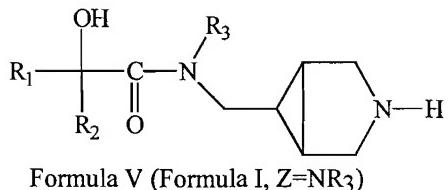
its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, or N-oxides, polymorphs, or metabolites, wherein

R<sub>1</sub> and R<sub>2</sub> are independently selected from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl or optionally substituted phenyl wherein optional substituent(s) is/are selected from C<sub>1</sub>-C<sub>3</sub> alkyl, C<sub>1</sub>-C<sub>3</sub> alkoxy or halogen;

Z represents oxygen or NR<sub>3</sub> wherein R<sub>3</sub> represents hydrogen or C<sub>1</sub>-C<sub>3</sub> alkyl.

5. *(Original)* The method according to claim 4 wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes or gastrointestinal hyperkinesis.
6. *(Original)* The method for treatment or prophylaxis of an animal or a human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is mediated through muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of the pharmaceutical composition according to claim 3.
7. *(Original)* The method according to claim 6 wherein the disease or disorder urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes or gastrointestinal hyperkinesis.

8. (*Currently Amended*) A method of preparing a compound of Formula V,



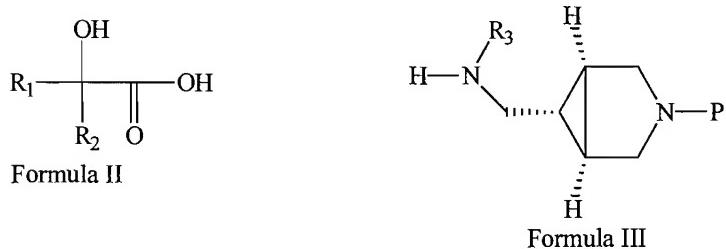
and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates, esters, enantiomers, diastereomers, or N-oxides, polymorphs or metabolites~~, wherein

R<sub>1</sub> and R<sub>2</sub> are independently selected from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl or optionally substituted phenyl wherein optional substituent(s) is/are selected from C<sub>1</sub>-C<sub>3</sub> alkyl, C<sub>1</sub>-C<sub>3</sub> alkoxy or halogen;

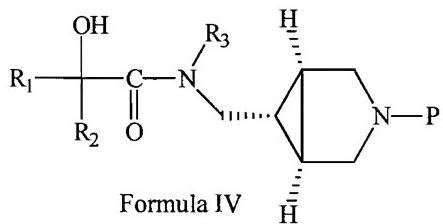
R<sub>3</sub> represents hydrogen or C<sub>1</sub>-C<sub>3</sub> alkyl;

said method comprising:

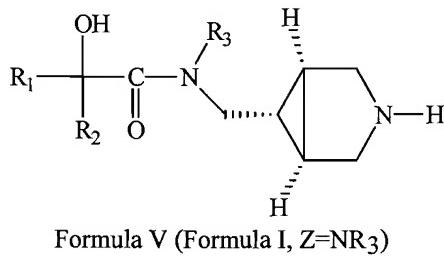
- (a) reacting a compound of Formula II with a compound of Formula III



to give a protected compound of Formula IV wherein R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are as defined, and P is a protecting group for an amino group

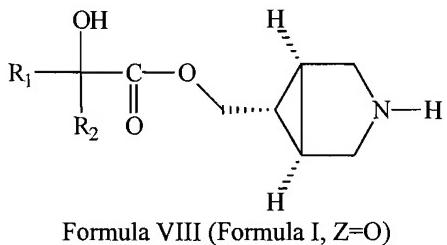


- (b) deprotecting the compound of Formula IV in the presence of a deprotecting agent to give compound of Formula V wherein R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are as defined.



9. (*Original*) The method of claim 8, wherein P is any protecting group for an amino group and is selected from the group consisting of benzyl and t-butyloxy carbonyl groups.
10. (*Original*) The method of claim 8, wherein the reaction of a compound of Formula II with a compound of Formula III to give a compound of Formula IV is carried out in the presence of N-methylmorpholine and 1-hydroxybenzotriazole and a condensing agent which is selected from 1-(3-dimethyl amino propyl)-3-ethyl carbodiimide hydrochloride (EDC), 1,3-dicyclohexylcarbodiimide (DCC) or 1,8-diazabicyclo [5.4.0]undec-7-ene (DBU).
11. (*Original*) The method of claim 8, wherein the reaction of a compound of Formula II with a compound of Formula III is carried out in a suitable polar aprotic solvent selected N,N-dimethylformamide, dimethyl sulfoxide, toluene, xylene and chloroform.
12. (*Original*) The method of claim 8, wherein the reaction of compound of Formula II with a compound of Formula III is carried out at 0-140°C.
13. (*Original*) The method of claim 8, wherein the deprotection of a compound of Formula IV is carried out with a deprotecting agent which is selected from palladium on carbon and hydrogen, ammonium formate and palladium on carbon, trifluoroacetic acid (TFA) or hydrochloric acid.

14. (*Original*) The method of claim 8, wherein the deprotection of a compound of Formula IV to give a compound of Formula V is carried out in a suitable organic solvent selected from methanol, ethanol, tetrahydrofuran or acetonitrile.
15. (*Currently Amended*) A method of preparing a compound of Formula VIII,



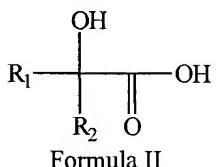
Formula VIII (Formula I, Z=O)

and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates~~, esters, enantiomers, diastereomers, or N-oxides, ~~polymorphs or metabolites~~, wherein

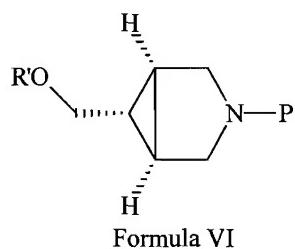
R<sub>1</sub> and R<sub>2</sub> are independently selected from C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl or optionally substituted phenyl wherein optional substituent(s) is/are selected from C<sub>1</sub>-C<sub>3</sub> alkyl, C<sub>1</sub>-C<sub>3</sub> alkoxy or halogen;

said method comprising:

- (a) reacting a compound of Formula II with a compound of Formula VI  
(wherein R' is hydroxy protecting group selected of p-toluene sulfonyl or methane sulfonyl)

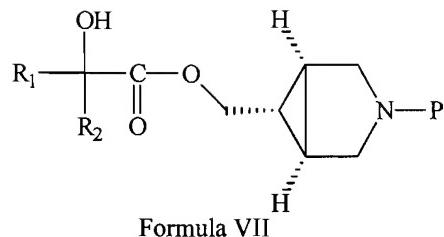


Formula II

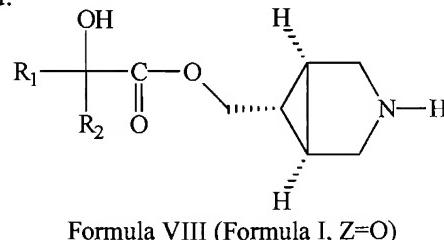


Formula VI

to give a protected compound of Formula VII wherein R<sub>1</sub> and R<sub>2</sub> are as defined, and P is a protecting group for an amino group



- (b) deprotecting the compound of Formula VII in the presence of a deprotecting agent to give a compound of Formula VIII wherein R<sub>1</sub> and R<sub>2</sub> are as defined.



16. *(Original)* The method of claim 15, wherein P is any protecting group for an amino group and is selected from benzyl or t-butyloxycarbonyl groups.
17. *(Original)* The method of claim 15, wherein the reaction of a compound of Formula VI with a compound of Formula II to give a compound of Formula VII is carried out in the presence of a condensing agent which is selected from 1,8-diazabicyclo [5.4.0]undec-7-ene (DBU) or 1,4-diazabicyclo[2.2.2]octane (DABCO).
18. *(Original)* The method of claim 15, wherein the reaction of a compound of Formula VI with a compound of Formula II is carried out in a solvent selected from benzene, toluene or xylene.
19. *(Original)* The method of claim 15, wherein the reaction of compound of Formula VI with a compound of Formula II is carried out at 0-140°C.
20. *(Original)* The method of claim 15, wherein the deprotection of a compound of Formula VII to give a compound of Formula VIII is carried out with a

deprotecting agent which is selected from palladium on carbon and hydrogen gas or ammonium formate and palladium on carbon.

21. *(Original)* The method of claim 15, wherein the deprotection of a compound of Formula VII to give a compound of Formula VIII is carried out in a suitable organic solvent selected from methanol or ethanol.